



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/500,132	02/08/2000	Kiyoshi Iseki	11197/I	2161
7590 01/16/2009				
John C. Altmiller Kenyon & Kenyon 1500 K Street N.W. Suite 700 Washington, DC 20005-1257			EXAMINER SIMONE, CATHERINE A	
			ART UNIT 1794	PAPER NUMBER
			MAIL DATE 01/16/2009	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

09/500,132

**Applicant(s)**

ISEKI ET AL.

**Examiner**

Catherine Simone

**Art Unit**

1794

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 and 20-25 is/are pending in the application.
- 4a) Of the above claim(s) 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 21-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C2)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

**DETAILED ACTION**

***Withdrawn Rejections***

1. The 35 U.S.C. 103(a) rejection of claims 1-3 and 21-23 over Masuda et al. in view of Kobayashi et al. of record in the previous Office Action mailed 7/8/2008, Pages 2-5, Paragraph #5 has been withdrawn due to the Applicant's amendment filed 10/6/2008.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 24 and 25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. The new recitation "the inorganic oxide layer consists substantially of one or more inorganic oxides" in claims 24 and 25 is deemed new matter. Looking at page 38, lines 6-7 of Applicants' Specification, Applicants have support for the inorganic oxide layer consisting of one or two inorganic oxides, not "substantially of one or more inorganic oxides", which has a different scope of meaning and could include more than two inorganic oxides. As a result, the Specification, as originally filed, does not provide support for this new recitation. Therefore, this new recitation is deemed new matter.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3 and 21-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirokawa et al. (US 5,230,923) in view of Misiano et al. (US 5,462,779).
6. Regarding claims 1, 3 and 21-23, Hirokawa et al. teach a functional roll film comprising a plastic film having gas barrier properties (col. 4, lines 5-15) and having an inorganic oxide layer on at least one surface, wherein the inorganic oxide layer is deposited by vacuum evaporation (col. 4, lines 42-56 and col. 7, lines 5-40), wherein the controlled maximum thickness of the inorganic oxide layer of the portion of the film is inherently equal to or less than 1.5 times the controlled minimum thickness of the inorganic oxide layer of the portion of the film among layer thickness values measured along the length and the width in the portion of the film due to the facts that Hirokawa et al. disclose the inorganic oxide layer to have a uniform composition and thickness from beginning to end during deposition (col. 7, lines 41-45) and that has a constant thickness (col. 8, lines 8-10) and that exhibits stable gas barrier properties (col. 2, lines 30-38), which is the same as that exhibited by the inorganic oxide layer disclosed in Applicant's present invention (see Applicant's Specification on page 3, lines 17-19 and page 4, lines 2-3 and lines 8-9). Furthermore, the static electricity of the plastic film with the inorganic oxide layer is deemed to be in the range from -10 kV to +10 kV, since Hirokawa et al. disclose

the same plastic film, i.e. polyester, polyamide, or polypropylene, and inorganic material, i.e. silicon dioxide, as disclosed in Applicant's specification.

Hirokawa et al. fail to specifically teach the plastic film being transparent.

Misiano et al. teach that it is well known in the packaging art to use a transparent plastic film such as polyethylene terephthalate, which is a polyester, as the base film for coating with a transparent inorganic oxide layer in order to provide a transparent packaging film with high barrier properties for oxygen and water vapor which is particularly effective for the production of packaging film for food stuffs (col. 3, lines 10-13 and 18-22).

Hirokawa et al. and Misiano et al. both teach inorganic oxide coated plastic film for use in packaging food stuffs and therefore are analogous art.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the plastic film in Hirokawa et al. to be transparent as suggested by Misiano et al. in order to provide a transparent packaging film with high barrier properties for oxygen and water vapor which is particularly effective for the production of packaging film for food stuffs.

Hirokawa et al. also fail to disclose one roll unit of the plastic film specifically having a width of at least 400 mm and a length of at least 4,000 m, a width of at least 1,000 mm and a length of at least 15,000 m, and a width of 400 to 1,000 mm and a length of 4,000 to 10,000 m. However, one of ordinary skill in the art would have recognized that the length and the width of a packaging plastic film to be sized depends on the object that is being packaged. Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have the packaging film of Hirokawa et al. be sized to having a width of at least 400

mm and a length of at least 4,000 m, a width of at least 1,000 mm and a length of at least 15,000 m, and a width of 400 to 1,000 mm and a length of 4,000 to 10,000 m, since the size would depend on the object being packaged. It is to be noted that it has been held that claims directed to a lumber package “of appreciable size and weight requiring handling by a lift truck” were held unpatentable over prior art lumber packages which could be lifted by hand because limitations relating to the size of the package were not sufficient to patentably distinguish over the prior art. MPEP 2144.04(IV).

Regarding claim 2, note the inorganic oxide layer comprises a composite oxide having at least two components, wherein the difference between a maximum wt% and a minimum wt% of one component of the composite oxide is within 20 wt% (col. 4, lines 57-68). In the alternative that the difference of the one component is a concentration variation of the one component, the exact difference between the maximum wt% and minimum wt% of the one component is deemed to be a result effective variable with regard to the evenness, i.e. uniformity, of the film. It would require routine experimentation to determine the optimum value of a result effective variable, such as exact difference between the maximum wt% and minimum wt% of the one component, in the absence of a showing of criticality in the claimed exact difference between the maximum wt% and minimum wt% of the one component. MPEP 2144.05 (II). One of ordinary skill in the art would have been motivated to have the difference between a maximum wt% and minimum wt% of the one component of the composite oxide being within 20 wt% in order to increase the evenness, i.e. uniformity, of the sheet.

Regarding claims 24 and 25, the inorganic oxide layer consists substantially of one or more inorganic oxides (col. 4, lines 57-61).

***Response to Arguments***

7. Applicant's arguments with respect to claims 1-3 and 21-25 have been considered but are moot in view of the new grounds of rejection, which are presented above.

***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Catherine Simone whose telephone number is (571) 272-1501.

The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on (571) 272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Catherine Simone/

Examiner, Art Unit 1794

/JENNIFER MCNEIL/

Supervisory Patent Examiner, Art Unit 1794